

REMARKS

The Examiner is thanked for the thorough Office Action. Pursuant to that Action, claims 1, 7 and 9 have been amended to more definitely set forth the invention and obviate the rejection. Support for the amendment of claims 1, 7 and 9 can be found in the Specification on page 10, lines 9-16. The present amendment is deemed not to introduce new matter. Claims 1-9 are in the application.

Reconsideration is respectfully requested of the rejection of Claims 1-4 under 35 U.S.C. § 101 as being based on non-statutory subject matter. Claim 1 has been amended to indicate that the extraction pad is adapted to be applied to a mucous membrane. As amended, Claims 1-4 do not claim a body part but merely indicate that the extraction pad is adapted to be placed in contact with a mucous membrane instead. The Examiner is thanked for his suggestion in obviating this rejection. Withdrawal of the rejection is accordingly respectfully requested.

Reconsideration is respectfully requested of the rejection of Claims 5 and 6 under 35 U.S.C. § 102(b) as being anticipated by Hollingsworth or Higo, et al.

The Hollingsworth reference discloses an iontophoresis device by which obtundents or local anesthetics can be readily applied electrically to prevent infliction of pain during dental operations.

There is, however, no disclosure whatever in Hollingsworth of an iontophoresis system for non-invasively taking a physiological substance out of a body as called for in the claims herein.

The Higo, et al. reference discloses an iontophoresis device which can be applied to mucous membranes and oral mucous membranes to efficiently administer medicines to the body. However,

Higo, et al., like Hollingsworth, fail to disclose an iontophoresis system for non-invasively taking a physiological substance out of a body. For this reason, it is respectfully submitted that neither Hollingsworth nor Higo, et al. anticipate or render unpatentably obvious the subject matter now called for in the claims herein. Consequently, the Examiner would be justified in no longer maintaining the rejection. Withdrawal of the rejection is accordingly respectfully requested.

Reconsideration is respectfully requested of the rejection of Claims 1, 3-4, and 7 and 8 under 35 U.S.C. § 102(b) as being anticipated by Tapper.

The Tapper reference discloses a method and apparatus for non-invasively withdrawing and accurately evaluating analytes using a high-voltage system. For example, Tapper discloses in column 13, lines 5-27, using voltages of 60 – 70 volts DC to an active negative electrode 64 drawing up to 3 milliamps with no injury.

In contradistinction, the present invention is concerned with an iontophoresis system for non-invasively withdrawing a physiological substance from the body using a low voltage. In this regard, Claims 1 and 7 have been amended to spell out specifically that a voltage of 10 volts or less is used for a period of from about 30 seconds to 20 minutes. The use of such low voltages and low current densities is described in the Specification herein on page 10, lines 9-22, wherein it is disclosed that a voltage of 10 volts or less can be advantageously used.

The Tapper reference nowhere discloses the use of electrical energy of 10 volts or less in carrying out a non-invasive iontophoresis to extract physiological substance from a body. Consequently, it is respectfully submitted that Tapper in no way anticipates or renders unpatentably obvious the subject matter now called for in the claims herein. For these reasons, it is respectfully

submitted that the rejection based on Tapper fails since it does not disclose all of the elements called for in the claims herein. Therefore, the Examiner would be justified in no longer maintaining this rejection. Withdrawal of the rejection is accordingly respectfully requested.

Reconsideration is respectfully requested of the rejection of Claims 2 and 9 under 35 U.S.C. § 103(a) as being unpatentable over Tapper in view of Cormier, et al.

The Tapper reference is discussed above.

The Cormier, et al. reference, the Examiner's secondary reference, fails to cure the deficiencies of the Tapper reference since this combination of references fails to disclose the low voltage system having electrical energy of 10 volts or less for non-invasively removing a physiological substance out of a living body.

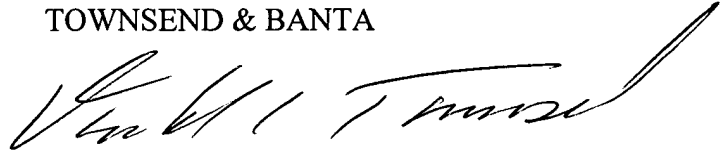
The method of the present invention constitutes an improvement in the art by having the characteristic of non-invasively extracting via a mucous membrane a physiological substance from a living body so as to shorten the detection time, compared with the prior art in which the physiologically active substance has been extracted from skin. It is believed that the process now called for in the claims herein constitutes a significant advance over the prior art of record and, consequently, the Examiner would be justified in no longer maintaining this rejection. Withdrawal of the rejection is accordingly respectfully requested.

In view of the foregoing, it is respectfully submitted that the application is now in condition for allowance and early action and allowance thereof is accordingly respectfully requested. In the event that there is any reason why the application cannot be allowed at the present time, it is respectfully requested that the Examiner contact the undersigned at the number listed below to

resolve any problems.

Respectfully submitted,

TOWNSEND & BANTA

A handwritten signature in black ink, appearing to read "Donald E. Townsend", written in a cursive style.

Donald E. Townsend
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